REMARKS

This document is in response to the Office Action dated December 19, 2003. Claims 2, 6, 8-11, 13-15, 23-26 and 30 remain pending and no claims are amended.

§103 Rejection of the Claims

Claims 2, 6, 8-11, 13, 14, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brownlee et al. (U.S. Patent No. 4,134,408, "Brownlee") in view of Silvian (U.S. Patent No. 6,301,504) and further in view of Donders et al. (U.S. Patent No. 6,115,634, "Donders"). Applicant respectfully traverses the rejection and submits that the Office Action has not established proper prima facie obviousness.

Applicant submits that the proposed combination of Brownlee, Silvian and Donders does not teach or suggest all of the elements recited in the claims.

For example, and contrary to the assertion in the Office Action, Brownlee alone, or in the proposed combination, does not appear to disclose an external multi-loop large-diameter telemetry coil. The Office Action does not provide a citation in Brownlee of a teaching or suggestion regarding telemetry and Applicant is unable to find such a teaching or suggestion.

Also, Applicant is unable to find in Brownlee a disclosure of a telemetry coil for communicating with an implanted device having a plurality of loops of a conductive wire wound substantially in a common plane and concentrically around a central core, as recited in claim 15. The cited portions of the Brownlee specification do not refer to a plurality of loops of wire wound substantially in a common plane and the Brownlee figures do not clearly show such a structure. In addition, Applicant is unable to find support in the cited portions of Brownlee for the dimensions recited in claim 15.

Further, Applicant respectfully traverses the Office Action assertion regarding "a bed or a chair is flexible based on the materials of construction, and the bed or chair surrounds the telemetry coil, hence providing a flexible housing for the coil." Applicant is unable to find support in Brownlee for such assertions and the Office Action does not provide a citation.

It appears that the Examiner is relying on official notice as to the assertions in the Office Action. Accordingly, Applicant respectfully traverses and, pursuant to MPEP § 2144.03,

requests that the Examiner provide citation to an authority, provide an affidavit, or withdraw the assertion.

Even if the materials of construction in a bed or chair are flexible, Brownlee does not appear to teach or suggest the recited telemetry coil in a flexible housing.

In addition, the Office Action has not established *prima facie* obviousness since the cited documents do not appear to evince the required motivation to combine.

Silvian refers to a telemetry system where the transmitter includes a titanium can and relies on the can for a filtering function (Abstract). Silvian also refers to the overall function of the telemetry system as transmitting binary signals originating in an implanted device to a receiver (column 8 lines 46-49). Because Silvian refers to telemetry communication and is silent as to energy transfer, and because Brownlee refers to energy transfer with respect to an implanted device and is silent as to telemetry communication, Applicant respectfully submits that Silvian and Brownlee rely on different principles of operation. Pursuant to MPEP § 2143.01, if the proposed combination would change the principle of operation, then the teachings of the cited documents are not sufficient to establish *prima facie* obviousness. Here, it appears that the principles of operation differ, and thus, the proposed combination is improper.

Also, the Office Action asserts that it would have been obvious "to have used the ferrite core in the Brownlee system in order enable high transmission rates so data can be transferred without significant error while preserving the limited power resources of the implanted device." However, MPEP § 2143.01 provides that the mere fact that cited documents can be combined or modified does not render the resultant combination obvious unless the documents suggest the desirability of the combination. Here, the record does not include evidence of a motivation to select, or combine Brownlee and Silvian in the manner proposed. Thus, it appears, the proposed combination of Brownlee and Silvian is improper.

The ferrite core referred to in Silvian is with respect to the coil transmitting from an implanted device while the coil in Brownlee is external. Thus, because Silvian refers to use of a ferrite core to increase a communication rate from an implanted device and because Brownlee refers to energy transfer from an external device and does not refer to communication rates, neither Brownlee nor Silvian suggest the desirability of combining with the other.

Donders refers to an antenna for an implantable medical device that is outside of a hermetic canister (Abstract). In contrast to Donders, Silvian refers to a transmitter coil inside of a can with the can providing filtering (Abstract, FIG. 1) and Brownlee refers to a coil external to an implantable device for electromagnetic energy transmission. Thus, it appears that the proposed combination is improper because it would render at least one of Brownlee, Silvian or Donders unsatisfactory for its intended purpose. (See M.P.E.P. § 2143.01). Applicant submits that to combine in the manner proposed would require a change in the principle of operation of either one or the other.

Therefore, because all claim elements are not taught or suggested by the proposed combination and because the record does not evince the required motivation to make the proposed combination, Applicant respectfully submits that *prima facie* obviousness has not been established. Reconsideration and allowance of claims 2, 6, 8-11, 13, 14, and 15 is respectfully requested.

In addition, Office Action refers to "powered magnetic material." Applicant submits that such an assertion does not amount to a teaching or suggestion of a "ferrite powder" as recited in claim 6. Applicant requests clarification or withdrawal of the assertion.

Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Weijand (U.S. Patent No. 6,298,271) in view of Silvian (U.S. Patent No. 6,301,504) and further in view of Donders et al. (U.S. Patent No. 6,115,634). Applicant respectfully traverses the rejection because the Office Action fails to establish *prima facie* obviousness.

Pursuant to MPEP § 2143.01, because the proposed combination would render at least one of Weijand, Silvian or Donders unsatisfactory for its intended purpose, then the teachings of the cited documents are not sufficient to establish *prima facie* obviousness.

Weijand refers to an antenna within an external programmer head (Abstract). In contrast to Weijand, Silvian and Donders relate to implantable devices. Applicant respectfully submits that the principles of operation of Silvian and Donders differ from that of Weijand, and to combine in the manner proposed would require substantial reconstruction and redesign as well as a change in the basic principle of operation. Consequently, the proposed combination is improper.

In rejecting claim 23, the Office Action refers to Brownlee (page 5, first paragraph). Nevertheless, the statement of rejection on page 3 is silent as to Brownlee. Applicant requests clarification of the rejection or its withdrawal in the next communication.

Applicant respectfully requests reconsideration and allowance of claim 23.

Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Weijand (U.S. Patent No. 6,298,271) in view of Silvian (U.S. Patent No. 6,301,504) and further in view of Donders et al. (U.S. Patent No. 6,115,634) and further in view of Kung (U.S. Patent No. 6,400,991). Applicant respectfully traverses the rejection and submits that the Office Action has not established a proper *prima facie* case of obviousness.

Applicant does not admit Kung is prior art and reserves the right to swear behind Kung at a later date. Nevertheless, Applicant believes the present claim is allowable over the proposed combination of Weijand, Silvian, Donders and Kung at least for the reasons herein.

Even if Weijand, Silvian, Donders and Kung could be combined, Applicant submits that the proposed combination does not teach or suggest all of the elements recited in the claim. For example, Applicant is unable to find in the proposed combination where the predetermined outer dimension is a diameter in a range of fifteen (15) to forty-six (46) centimeters, as recited in claim 24.

In addition, the Office Action has not established the required motivation to make the proposed combination. As discussed previously, Applicant submits that the proposed combination of Weijand, Silvian and Donders is improper. The addition of Kung does not cure the shortcomings noted earlier. Kung refers to an electromagnetic field source for providing electromagnetic energy (Abstract). The Office Action does not provide a citation in Kung of a teaching or suggestion of telemetry, and Applicant is unable to find such a teaching or suggestion. Thus, while Weijand, Silvian and Donders relate to telemetry communications, Kung refers to energy transmission (Summary). Applicant submits that the required motivation to combine Kung with the Weijand, Silvian and Donders is lacking since the principles of operation differ.

Therefore, because the proposed combination of Weijand, Silvian, Donders and Kung does not appear to teach or suggest all of the elements of claim 24, and since the required

motivation to combine is lacking, Applicant submits that prima facie obviousness has not been established. Reconsideration and allowance of claim 24 is respectfully requested.

Claims 25 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Weijand (U.S. Patent No. 6,298,271) in view of Silvian (U.S. Patent No. 6,301,504) and further in view of Donders et al. (U.S. Patent No. 6,115,634) and further in view of Zarinetchi et al. (U.S. Patent No. 6,389,318). Applicant respectfully traverses the rejection because the Office Action fails to establish *prima facie* obviousness.

Claims 25 and 26 depend on claim 23 and are believed to be allowable at least for the reasons stated for claim 23. The addition of Zarinetchi to the combination of Weijand, Silvian and Donders does not cure the aforementioned shortcomings.

Even if Weijand, Silvian, Donders and Zarinetchi could be properly combined, Applicant submits that the proposed combination does not teach or suggest all claim elements. For example, Applicant is unable to find in the cited documents, a flexible housing, where the flexible housing encases the first and the second telemetry coil, as recited in claim 25. Neither is Applicant able to find a flexible housing constructed of an insulating material, as recited in pending claim 26.

Zarinetchi refers to an energy transfer device (Abstract). The Office Action does not provide a citation in Zarinetchi of a teaching or suggestion of telemetry, and Applicant is unable to find such a teaching or suggestion. Thus, because Zarinetchi refers to energy transfer and Weijand, Silvian and Donders refer to telemetry communication, Applicant submits that the required motivation is lacking to combine Zarinetchi with Weijand, Silvian and Donders. In addition, the proposed combination appears to be improper for at least the reasons stated above with regard to Weijand, Silvian and Donders.

Applicant submits that *prima facie* obviousness has not been established. Reconsideration and allowance of claims 25 and 26 is respectfully requested.

Claim 30 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Weijand (U.S. Patent No. 6,298,271) in view of Stokes et al. (U.S. Patent No. 5,814,089, "Stokes").

Applicant respectfully traverses the rejection and submits that the Office Action has not established *prima facie* obviousness.

Applicant submits that the combination of Weijand and Stokes does not teach or suggest all elements of claim 30. For example, Applicant is unable to find in the proposed combination, among other things, a first and a second telemetry coil concentrically planarly wound substantially in a common plane and each adapted to inductively couple with the implanted medical device, where the second telemetry coil is constructed and arranged to operate at a different telemetry operational frequency than the first telemetry coil, as recited in claim 30.

The Office Action asserted that Stokes discloses a single and multi-antenna transmitter and teaches using different operating frequencies. However, Applicant is unable to find a teaching or suggestion of such a multi-antenna transmitter in Stokes. Rather, Stokes appears to refer to a single antenna for transmitting (column 4 lines 33-46). Also, Applicant cannot find, in Stokes, a teaching or suggestion of a second telemetry coil constructed and arranged to operate at a different telemetry operational frequency than the first telemetry coil, as recited in the claim.

In addition, Applicant submits that the asserted motivation to combine Weijand and Stokes is insufficient to establish *prima facie* obviousness. The Office Action refers to portions of each document and yet neither evinces a motivation to combine one with the other. For example, the Office Action has not set forth a specific showing of why one would select Weijand for combining with Stokes. The ability to combine, without more, is inadequate to establish the motivation to combine.

For these and other reasons, it appears that *prima facie* obviousness has not been established. Applicant respectfully requests reconsideration and allowance of claim 30.

Filing Date: March 31, 2000 Title: INDUCTIVE COIL APPARATUS FOR BIO-MEDICAL TELEMETRY

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6911 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-

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